THREAD & NEEDLE RECOMMENDATIONS

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THREAD MATERIAL OVERVIEW

POLYESTER

Best Choice for Outdoor Projects

Polyester is the most common choice for outdoor applications. Perfect for sail and canvaswork, polyester thread has high strength and stretch control, stability in sunlight (UVR), and resistance to needle heat, abrasion, saltwater and mildew. Use a lighter weight polyester thread in sewing machines that struggle in heavy canvas.

PTFE/FLUOROPOLYMER

Lasts a Lifetime

PTFE and fluoropolymer threads (Sailrite[®] Lifetime Thread and Tenara[®]) come with a lifetime guarantee. These are the best threads to use for outdoor applications where your projects will see frequent, intense sun or other weather extremes. These threads are unaffected by exposure to UV rays, cleaning agents, pollution, saltwater, air, rain and snow. These threads are an excellent choice for awnings, biminis, boat covers and more.

NYLON

Perfect for Upholstery

Nylon threads have excellent elasticity, which makes them the perfect choice for upholstery projects. When you sit on a seat, you want the thread to be able to give and rebound under your weight. Nylon is excellent for indoor upholstery, automotive upholstery, luggage and more.

MONOFILAMENT

Clear Thread for Hidden Stitches

Monofilament thread is a clear, strong nylon thread that blends in with fabrics. This thread sews well and comes in three sizes. Use #18 for quilting, stretchy or heavy garments, and tacking and binding stitches; #40 for fine leather goods and upholstery; and #52 for binding and serging carpets and for upholstery.

6 QUICK TIPS ABOUT THREAD SIZE

- **#1** Tex 70 is the heaviest commercial size recommended for home sewing machines.
- #2 Heavier threads make your stitching more visible.
- **#3** The thread size indicates the thread's thickness. If another weight is given for thread (like ounces), it refers to the amount of thread on the spool.
- #4 Thread tends to get stronger as it gets thicker.
- #5 The tension on your sewing machine will need to be adjusted when you switch thread weights.
- #6 Try to use a needle where the eye is 40% larger than the thickness of the thread.

WHAT IS TEX SIZING?

Tex is the most consistent of the measuring methods. It uses a fixed length to measure the weight of a thread. Tex is the weight (in grams) of 1,000 meters of thread. Or, in other words, 1,000 meters of thread that weighs 1 gm. = 1 Tex. The higher the Tex, the thicker the thread.

AUTO & RV

Thread & Needle Recommendations

USES	THREAD SIZE RANGE	NEEDLE POINT
Auto Covers	Tex 70-Tex 92	Round/Sharp
Auto Upholstery	Tex 70-Tex 135	Round/Sharp
Awnings	Tex 70-Tex 138	Round/Sharp
Curtains	Tex 70 or Tex 75	Round/Sharp
Flooring & Mats	Tex 90	Round/Sharp
Pop-Up Enclosures	Tex 90 or Tex 92	Round/Sharp
Powersport Upholstery	Tex 70-Tex 135	Round/Sharp
RV Covers	Tex 70-Tex 92	Round/Sharp
RV Cushions	Tex 70-Tex 135	Round/Sharp
RV Headliners	Tex 70-Tex 135	Round/Sharp, Ball
RV Pillows	Tex 70 or Tex 75	Round/Sharp
RV Skirts	Tex 70-Tex 90	Round/Sharp
RV Upholstery	Tex 70-Tex 135	Round/Sharp
Sun Shades	Tex 70-Tex 138	Round/Sharp
Tarps	Tex 70-Tex 90	Round/Sharp
Tonneau Covers	Tex 70-Tex 92	Round/Sharp
Trunkliner	Tex 90	Round/Sharp
Windows	Tex 70-Tex 92	Round/Sharp

Needle Size Selection

THREAD SIZE	NEEDLE SIZE*
Tex 18	#10 or #12
Tex 30	#10 or #12
Tex 35	#10 or #12
Tex 40	#12 or #14
Tex 45	#14 or #16
Tex 50	#14 or #16
Tex 52	#14 or #16
Tex 70	#16 or #18
Tex 75	#16 or #18
Tex 90	#18-#20
Tex 92 (PTFE)	#14-#19
Tex 135	#20-#22
Tex 138 (PTFE)	#20-#23

*If sewing 4 or more layers, use the larger needle size; 3 or fewer layers, use the smaller size.

MACHINE	THREAD SIZE
Home Machine	up to Tex 70
Ultrafeed	up to Tex 92
Fabricator/Industrial	up to Tex 138

HOBBY

Thread & Needle Recommendations

USES	THREAD SIZE RANGE	NEEDLE POINT
Bags • Lightweight (3 oz. or fewer) • Medium weight (4-14 oz.) • Heavy weight (15 oz. or more)	Tex 18-Tex 45 Tex 50-Tex 75 Tex 90-Tex 135	Round/Sharp Round/Sharp Round/Sharp
Flags & Burgees	Tex 45-Tex 70	Round/Sharp
Utility	Tex 70-Tex 135	Round/Sharp

Needle Size Selection

THREAD SIZE	NEEDLE SIZE*
Tex 18	#10 or #12
Tex 30	#10 or #12
Tex 35	#10 or #12
Tex 40	#12 or #14
Tex 45	#14 or #16
Tex 50	#14 or #16
Tex 52	#14 or #16
Tex 70	#16 or #18
Tex 75	#16 or #18
Tex 90	#18-#20
Tex 92 (PTFE)	#14-#19
Tex 135	#20-#22
Tex 138 (PTFE)	#20-#23

*If sewing 4 or more layers, use the larger needle size; 3 or fewer layers, use the smaller size.

MACHINE	THREAD SIZE
Home Machine	up to Tex 70
Ultrafeed	up to Tex 92
Fabricator/Industrial	up to Tex 138

INDOOR

Thread & Needle Recommendations

USES	THREAD SIZE RANGE	NEEDLE POINT
Commercial/Hospitality Seating	Tex 70-Tex 135	Round/Sharp
Décor & Upholstery • Lightweight (3 oz. or fewer) • Medium weight (4-14 oz.) • Heavy weight (15 oz. or more)	Tex 18-Tex 45 Tex 50-Tex 75 Tex 90-Tex 135	Round/Sharp Round/Sharp Round/Sharp
Drapery	Tex 30-Tex 70	Round/Sharp
Roller Shades	Tex 70-Tex 138	Round/Sharp

Needle Size Selection

THREAD SIZE	NEEDLE SIZE*
Tex 18	#10 or #12
Tex 30	#10 or #12
Tex 35	#10 or #12
Tex 40	#12 or #14
Tex 45	#14 or #16
Tex 50	#14 or #16
Tex 52	#14 or #16
Tex 70	#16 or #18
Tex 75	#16 or #18
Tex 90	#18-#20
Tex 92 (PTFE)	#14-#19
Tex 135	#20-#22
Tex 138 (PTFE)	#20-#23

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MACHINE	THREAD SIZE
Home Machine	up to Tex 70
Ultrafeed	up to Tex 92
Fabricator/Industrial	up to Tex 138

MARINE

Thread & Needle Recommendations

USES	THREAD SIZE			
JSES	RANGE	NEEDLE POINT	USES	
Awnings	Tex 70-Tex 138	Round/Sharp	Sail Covers	
Biminis & T-Tops	Tex 70-Tex 138	Round/Sharp	Sails • Spinnakers,	
Boat Covers	Tex 70-Tex 138	Round/Sharp	Drifters Light Air Sails	
Boat Flooring & Mats	Tex 90	Round/Sharp	(0.75 oz. or fewer) • Spinnakers, Drifters Light Air	
Bug Protection • 2 oz. or fewer • 3 oz5 0z. • 6 oz. or more	Tex 30 or Tex 35 Tex 45 Tex 70-Tex 90	Ball Round/Sharp Round/Sharp	Sails (1.5 oz. or more) • Dinghies, Daysailors, Beach	
Chafe Protection	Tex 70-Tex 138	Round/Sharp	Cats (4 oz.) • Heavier Sails	
Curtains	Tex 70 or Tex 75	Round/Sharp	(5 oz. or more)	
Dodgers	Tex 70-Tex 138	Round/Sharp	Spinnaker Socks	
5			Sun Shades	
Enclosures	Tex 70-Tex 138	Round/Sharp	Tarps	
Exterior Cushions	Tex 70-Tex 135	Round/Sharp	Trampolines	
Exterior Pillows	Tex 70 or Tex 75	Round/Sharp	Weather Cloths	
Exterior Upholstery	Tex 70-Tex 135	Round/Sharp	Windows	
Headliners & Hull Liners	Tex 70-Tex 135	Round/Sharp	Windshield Covers	
Insulations & Padding	Tex 70-Tex 135	Round/Sharp		
Interior Cushions	Tex 70-Tex 135	Round/Sharp		
Interior Pillows	Tex 70 or Tex 75	Round/Sharp		
Interior Upholstery	Tex 70-Tex 135	Round/Sharp		
Sacrificial Sail Covers	Tex 70-Tex 138	Round/Sharp		

Round/Sharp

Needle Size Selection

THREAD SIZE	NEEDLE SIZE*
Tex 18	#10 or #12
Tex 30	#10 or #12
Tex 35	#10 or #12
Tex 40	#12 or #14
Tex 45	#14 or #16
Tex 50	#14 or #16
Tex 52	#14 or #16
Tex 70	#16 or #18
Tex 75	#16 or #18
Tex 90	#18-#20
Tex 92 (PTFE)	#14-#19
Tex 135	#20-#22
Tex 138 (PTFE)	#20-#23

*If sewing 4 or more layers, use the larger needle size; 3 or fewer layers, use the smaller size.

Sewing Machine Thread Size Ranges

MACHINE	THREAD SIZE
Home Machine	up to Tex 70
Ultrafeed	up to Tex 92
Fabricator/Industrial	up to Tex 138

Tex 70-Tex 138

Sail Bags

OUTDOOR LIVING

Thread & Needle Recommendations

USES	THREAD SIZE RANGE	NEEDLE POINT
Awnings	Tex 70-Tex 138	Round/Sharp
Bug Protection • 2 oz. or fewer • 3 oz5 0z. • 6 oz. or more	Tex 30 or Tex 35 Tex 45 Tex 70-Tex 90	Ball Round/Sharp Round/Sharp
Covers	Tex 70-Tex 138	Round/Sharp
Cushions	Tex 70-Tex 135	Round/Sharp
Drapery	Tex 30-Tex 45	Round/Sharp
Pillows	Tex 70 or Tex 75	Round/Sharp
Shade Sails	Tex 70-Tex 138	Round/Sharp
Sling Chairs	Tex 70-Tex 135	Round/Sharp
Umbrellas	Tex 70-Tex 92	Round/Sharp
Upholstery	Tex 70-Tex 135	Round/Sharp
Wire Hung Canopies & Pergolas	Tex 70-Tex 138	Round/Sharp

Needle Size Selection

THREAD SIZE	NEEDLE SIZE*
Tex 18	#10 or #12
Tex 30	#10 or #12
Tex 35	#10 or #12
Tex 40	#12 or #14
Tex 45	#14 or #16
Tex 50	#14 or #16
Tex 52	#14 or #16
Tex 70	#16 or #18
Tex 75	#16 or #18
Tex 90	#18-#20
Tex 92 (PTFE)	#14-#19
Tex 135	#20-#22
Tex 138 (PTFE)	#20-#23

*If sewing 4 or more layers, use the larger needle size; 3 or fewer layers, use the smaller size.

MACHINE	THREAD SIZE
Home Machine	up to Tex 70
Ultrafeed	up to Tex 92
Fabricator/Industrial	up to Tex 138